

## **EPA's Technical Stakeholder Committee (TSC) on Yosemite Slough**

**November 30, 2011: 1:30pm – 4:30pm; EPA Offices; 75 Hawthorne Street, San Francisco, CA**

### **Draft Agenda**

1. Welcome and Introductions (5 minutes)
2. Purpose of the Technical Stakeholder Committee (5 minutes)
3. Getting to Cleanup: The Big Picture (20 minutes)
  - a. What is the Site?
  - b. Regulatory Status of the Site
  - c. Use of Non-Time Critical Removal Action (NTCRA) under CERCLA
  - d. EPA's Draft Slough Sediments Cleanup Schedule
  - e. Coordination with Slough-Adjacent Projects
  - f. Anticipated Public Participation Process on the EECA
4. Contents of an Engineering Evaluation/Cost Analysis (EECA) for Yosemite Slough (15 minutes)
  - a. Technical Studies needed for remedy design
    - Waste characterization
    - Benchscale dewatering treatability study
    - Geotechnical /Geophysical study
5. Project Setting, Constraints and Opportunities (20 minutes)
  - a. Geology and Sediment Type
  - b. Hydrology
  - c. Natural Resources
  - d. Cultural Resources
6. Site Contaminants of Concern (30 minutes)
  - a. Extent of Site Contamination/Site Boundaries
  - b. List of COCs and their collocation of with PCBs
  - c. Process to Estimate Site Volume
  - d. Upland Source Control of Contaminant Risks
7. Draft Removal Action Objectives (15 minutes)
8. Site Conceptual Model, Streamlined Risk Assessment and Derivation of Sediment Remediation Goals (30 minutes)
9. Planning for Key Potential ARARs and Substantive Permitting Requirements (15 minutes)
  - a. Clean Water Act Section 401 (Water Board)
  - b. Dredge/Excavation/Fill permit technical requirements (Clean Water Act Section 404)
  - c. BCDC permit technical requirements (BCDC)
  - d. Other Potential ARARs: USFWS, CDFG, State Lands, NOAA/NMFS
  - e. Other considerations: PCB TMDL Implementation Plan (Water Board)
10. Agenda Topics for Future TSC Meetings (10 minutes)
11. Setting Dates for all TSC meetings (5 minutes)
12. Review of Action Items from Today's TSC Meeting (10 minutes)



## EPA's Best Case Schedule for Yosemite Slough Cleanup

Major Milestone		Timeframe
1	EECA Technical Stakeholder Committee Meetings	November 2011 – May 2012
2	Public Workshop(s) on EECA Planning	Spring 2012
3	Public Comment Period & Public Meeting on the EECA	Summer 2012
4	Technical Studies for remedy design	Summer – Fall 2012
5	Final EECA and EPA Action Memorandum	Fall 2012
5	Remedy Design Planning and “Permitting”	Fall 2012 – Spring 2013
6	Start Remedy Implementation	Summer 2013

### Assumes:

- a. Successful Technical Stakeholder Committee and public involvement activities
- b. EPA and PRPs achieve legal settlement on remedy design and implementation by Fall 2012
- c. No delays during design and “permitting” process
- d. Navy Parcel F cleanup can start no sooner than summer 2014
- e. State Park wetlands restoration on southside of slough can start no sooner than summer 2014
- f. For every year Slough sediments cleanup is delayed past 2013, Navy Parcel F and State Parks southside wetlands projects are delayed at least one year.

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Yosemite Slough Sediments Cleanup Major Milestone Schedule; Best Case  
November 30, 2011

## Potential Agenda Item Topics

### EPA's Technical Stakeholder Committee (TSC) Meetings

#### Yosemite Slough Site EECA

TSC Meeting	DATE	POTENTIAL TOPICS
#2	TBD on November 30	<ul style="list-style-type: none"><li>• Sediment Dredging Technologies</li><li>• Tidal Control and Sediment Excavation</li><li>• Identification of Possible Project Staging Areas</li><li>• Onsite Management of Excavated Materials</li><li>• Offsite Management of Excavated Materials</li><li>• Transportation of Excavated Materials</li><li>• Water Treatment and Management</li><li>• Need, Type and Sources of Backfill</li><li>• Methodologies for Protection of Adjacent Properties</li><li>• Preliminary Screening of Technologies</li></ul>
#3	TBD on November 30	<ul style="list-style-type: none"><li>• Presentation on Preliminary Removal Alternatives</li><li>• Costing Key Components of Removal Alternatives</li><li>• Screening and Preliminary Analysis of Removal Alternatives</li><li>• Revisit Potential Key ARARs and Permitting Requirements</li></ul>
#4	TBD on November 30	<ul style="list-style-type: none"><li>• Presentation of Preliminary Draft EECA</li><li>• More Discussion on Analysis of Removal Alternatives</li><li>• Next Steps to get to Draft EECA</li></ul>

## **DRAFT Removal Action Objectives (RAOs) for the Yosemite Slough EECA**

November 30, 2011

1. **Protect Current and Future Beneficial Uses.** Remove contaminants of concern to levels that are protective of human health and environment based on reasonably anticipated current and future beneficial uses of the slough including those described in the Water Board's Basin Plan and the California State Parks General Plan for the Candlestick Recreational Area.
2. **Protect Human Health.** (a) Limit or reduce the potential risk to human health from the consumption of shellfish from Yosemite Slough contaminants. (b) Limit or reduce the potential biomagnifications of total PCBs at higher trophic levels in the food chain to reduce the potential risk to human health from consumption of sport fish (c) Limit or reduce the potential for direct contact with sediment contaminated by COC's. (d) Limit the risks to workers, vendors, and the general public associated with working around water, working with heavy equipment, and working around hazardous materials.
3. **Protect Wildlife.** Reduce the risk of benthic feeding and piscivorous birds, including surf scoters, from exposure to site contaminants of concern through consumption of contaminated prey and incidental ingestion of sediment.
4. **Prevent Contaminant Migration to Adjacent Areas during Removal Action.** Prevent, to the extent practicable, the migration of resuspended sediment during removal operations to adjacent areas (e.g. Cal Parks wetlands restoration areas, Navy Parcel E-2 wetland restoration areas, and Navy Parcel F).
5. **Prevent Spills of Contaminants after Removal from Slough.** Prevent, to the extent practicable, the potential for spillage or leakage of any contaminated sediment and water during sediment dewatering activities and transport to the offsite disposal facility.
6. **Protect local properties, residents, workers, and aquatic natural resources during the sediment removal work.** Prevent, to the extent practicable, impacts to the surrounding community and environment during sediment removal activities, (e.g. implement traffic control, dust control, and/or noise monitoring plans as necessary to limit impacts to nearby residences and businesses).
7. **Support a Healthy Benthic Environment in Slough.** Conduct removal action and leave slough bottom/sediments in a condition (e.g. toxicity, grain size, configuration, vegetation) that supports slough habitat and a healthy benthic ecology.
8. **Provide a Cost Effective Remedy.** Conduct an alternatives analysis that includes cost-effectiveness to select a remedy that provides the greatest value while still being inclusive of all Removal Action Objectives.

# Streamlined Risk Assessment and Derivation of Sediment Remediation Goals

November 30, 2011

Hunters Point Naval Shipyard- Parcel F		
PCB Cleanup Goal (ppb)	Receptor	Basis
1,350	human consumption of shellfish	$10^{-5}$ risk
1,240	Surf Scoter	SUF of 0.5

Source: Final Feasibility Study Report for Parcel F; Hunters Point Shipyard, San Francisco, CA dated April 30, 2008

Yosemite Slough Recommended Remedial Goal for PCBs		
Weighted Average Cleanup Goal (ppb)	Not-To-Exceed Cleanup Goal (ppb)	Basis
386	1,240	The calculated area weighted average of 386 $\mu\text{g}/\text{kg}$ corresponds to a $3 \times 10^{-6}$ risk for human health. Assumes a minimum of one foot of backfill with no more than 143 $\mu\text{g}/\text{kg}$ PCB.

# **EPA's Draft Table Of Contents For The Yosemite Slough Engineering Evaluation/Cost Analysis (EECA)**

## **Executive Summary**

- 1 Introduction**
- 2 Site Description and Background**
  - 2.1 Site Location and Land Use**
  - 2.2 Site History**
  - 2.3 Topography and Site Features**
  - 2.4 Geology**
  - 2.5 Surface Water Hydrology and Tides**
  - 2.6 Sensitive Species and Environments**
  - 2.7 Cultural Resources**
  - 2.8 Previous Investigations**
- 3 Source, Nature, and Extent of Contamination**
  - 3.1 Site Conceptual Exposure Model**
  - 3.2 Description of Contaminated Material**
  - 3.3 Location of Contaminated Material**
  - 3.4 Volume of Contaminated Material**
  - 3.5 Physical and Chemical Attributes of COCs**
- 4 Streamlined Risk Evaluation**
  - 4.1 Human Health Streamlined Risk Evaluation**
  - 4.2 Ecological Streamlined Risk Evaluation**
  - 4.3 Ecological Risk Summary and Conclusions**
- 5 Identification of Removal Action Objectives and Remedial Goals**
  - 5.1 Removal Action Objectives**
  - 5.2 Remedial Goals**
  - 5.3 Applicable or Relevant and Appropriate Requirements**

Draft EECA Table of Contents

Yosemite Slough Site

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## **EPA's Draft Table Of Contents For The Yosemite Slough Engineering Evaluation/Cost Analysis (EECA)**

- 5.4 Scope of Removal Action
- 6 Identification of Removal Action Technologies and Alternatives Development
  - 6.1 Description of Elements of Potential Removal Actions
    - 6.1.1 No Action
    - 6.1.2 Institutional Controls
    - 6.1.3 In-situ Containment/Capping and Shoreline Stability
    - 6.1.4 Sediment Dredging
    - 6.1.5 Tidal Control and Sediment Excavation
    - 6.1.6 Onsite Management of Excavated Material
      - Solids Separation
      - Dewatering of Sediments
      - Onsite Reuse of Uncontaminated Materials
      - Onsite Treatment of Contaminated Materials
    - 6.1.7 Transportation of Excavated Material
    - 6.1.8 Off-Site Management of Excavated Material
    - 6.1.8 Water Treatment and Management
    - 6.1.9 Backfilling of Excavated Areas
  - 6.2 Screening of Management and Treatment Technologies
    - 6.2.1 No Action
    - 6.2.2 Institutional Controls
    - 6.2.3 Sediment Dredging
    - 6.2.4 Management and/or Treatment of Contaminated Material
  - 6.3 Statement of Removal Action Alternatives
    - 6.3.1 Alternative A: No Action
    - 6.3.2 Alternative B: Institutional Controls
    - 6.3.3 Alternative C: TBD



## **EPA's Draft Table Of Contents For The Yosemite Slough Engineering Evaluation/Cost Analysis (EECA)**

### **6.3.3 Alternative D: TBD**

## **7 Comparative Analysis of Removal Action Alternatives**

### **7.1 Overview of Evaluation Criteria**

### **7.2 Effectiveness**

#### **7.2.1 Overall Protection of Human Health and the Environment**

#### **7.2.2 Compliance with ARARs and Other Criteria, Advisories, Guidance**

#### **7.2.3 Long-Term Effectiveness and Permanence**

#### **7.2.4 Reduction in Toxicity, Mobility, or Volume**

#### **7.2.5 Short-Term Effectiveness**

### **7.3 Implementability**

#### **7.3.1 Technical Feasibility**

#### **7.3.2 Administrative Feasibility**

#### **7.3.3 Availability of Services and Materials**

#### **7.3.4 State and Local Agency Acceptance**

#### **7.3.5 Community and Local Stakeholder Acceptance**

### **7.4 Costs of Response Alternatives**

### **7.5 Differentiators between Alternatives**

## **8 Recommended Removal Action Alternative**

### **8.1 Description of Evaluation Process Used to Develop Recommended Action**

### **8.2 Recommended Removal Action**

## **9 References**

## **Tables and Figures**

## **Appendices**

### **A Volume Calculations**

### **B Cost Estimates**

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